

ABSTRACT OF THE DISCLOSURE

In a process for producing a semiconductor member, and a solar cell, making use of a thin-film crystal semiconductor layer, the process comprises the steps 5 of: (1) anodizing the surface of a first substrate to form a porous layer at least on one side of the substrate, (2) forming a semiconductor layer at least on the surface of the porous layer, (3) removing the semiconductor layer at its peripheral region, (4) 10 bonding a second substrate to the surface of the semiconductor layer, (5) separating the semiconductor layer from the first substrate at the part of the porous layer, and (6) treating the surface of the first substrate after separation and repeating the above 15 steps (1) to (5).

This process enables separation of the thin-film semiconductor layer at a small force while causing less cracks, breaks or defects to be brought into it and can manufacture high-performance semiconductor members and 20 solar cells in a good efficiency.